

AMENDMENT TO THE SPECIFICATION

Please amend paragraphs 0004, 0027, 0028, 0038, 0042, 0045, 0046, 0048, and 0055 as follows:

[0004] As a first example of a binding of the aforementioned type is that of "hinge-type" cross-country ski bindings marketed by the assignee Salomon S.A. under the trademark "SNS PROFIL." Another binding of the aforementioned type is that described in the document EP 768 103 and in U.S. Patent No. 6,017,050, and which is found on certain cross-country ski binding devices marketed by the assignee under the trademark "SNS PILOT." In both cases, the boot is articulated at its front end about a transverse axis in relation to the ski, which is provided by a retaining system forming a jaw in which ~~an~~ a pivot rod affixed to the boot sole is received. The two systems differ by the design of the systems for the elastic return of the boot to a low position.

[0027] As can be seen from FIGS. 1 and 2, when the connecting member moves from its low position to its high position, the flexible linkage 30 moves lengthwise and pulls the movable carriage forward and causes the compression of the spring, which therefore provides a return force.

[0028] According to a particular embodiment, the flexible linkage is substantially inextensible. For example, this can be a metallic cable or a cable made of fibers exhibiting very low extensibility, for example, a cable made of aramid fibers. One can also envision this link to be made in the form of a strip, such as a flat ~~flap~~ strip having a width much greater than its thickness. This traction strip can be obtained, for example, in the form of a metallic strip, or of a harness of parallel fibers embedded in a polymer material. In a particular embodiment, the linkage is sufficiently supple and flexible not to produce a notable elastic effect, and in particular, to support a return having an angle of about 90 degrees. Therefore, the flexibility of the linkage 30 should be generally understood as being the flexional flexibility about the

return axis. This flexibility of the link cannot be only local, because the linkage moves in relation to the return. However, particularly if the flexible linkage is a strip, this strip will not be flexible in flexion about an axis perpendicular to the plane of the strip; but this will not prevent the strip from being considered as flexible in the context of the invention if it does not offer any substantial resistance to the flexion about the return axis.

[0038] Furthermore, this boot 46 has, at its front end, a front transverse connector, in the form of a bar 48 arranged across the groove and, set back from the front bar 48, a second transverse bar 50 also arranged across the groove and located substantially in an area vertically beneath an ~~corresponding to the~~ area of the metatarso-phalangeal articulation zone of the user's foot, and at the most, at the rear limit of the first third along the length of the boot which constitutes the extreme rear limit of the metatarso-phalangeal articulation zone.

[0042] Indeed, a return system is found in this second embodiment, in which the elastic member 20, in this case, a traction spring (i.e., a tension spring), is integrated into a housing 22 arranged within a guiding ridge 18 of the device and is connected by a rear end to the base 12 of the binding device. According to the invention, the front end of the elastic member is connected to a flexible linkage 30 that extends forward. The flexible linkage is provided at its front end with a hook 58 made of metal, for example. As can be seen in FIGS. 6 and 7, the hook 58 is adapted to be connected to the rear bar 50 of the boot to ensure the connection of the elastic member 20 to the boot 46, and therefore to enable the system to ensure its function of elastic return. Therefore, the hook 58 forms a connecting member between the flexible linkage and the boot, but this connecting member is only connected to the remainder of the binding device by the flexible linkage 30.

[0045] Therefore, according to another aspect of the invention, the hook 58 has a guiding portion 60 that is adapted to cooperate with complementary surfaces of the base 12 of the binding so that, when the elastic member 20 returns the hook 58 to a resting position, by means of the lengthwise movement of the flexible linkage 30, in the absence of the boot, the latter is

guided and maintained in this predetermined position due to the cooperation of the guiding portion and of the associated shapes forms of the base. Furthermore, it is seen that the binding device also has a drawer/slide 62 which, controlled by the opening lever 54, also cooperates with the guiding portion of the hook in order to bring the hook from its resting position to a waiting position enabling the positioning of the boot.

[0046] Indeed, one can see in FIGS. 5-7 that the binding device has a drawer/slide 62 that is mounted to slide longitudinally on the base 12 of the binding, and whose front portion 61 is connected to the movable jaw 52 in order to follow the longitudinal movements thereof, which are controlled by the lever 54. Thus, when the lever 54 is lifted to bring the binding into an open state, it is noted that the drawer/slide 62 advances longitudinally at the same time as the movable jaw 52. However, the drawer/slide 62 has a rear portion 64 that is U-shaped in transverse cross-section and which, in the setback position of the drawer/slide 62, extends within the through opening 29 of the housing 22. With the adjacent walls 70 of this opening 29, the U-shaped rear portion 64 thus demarcates shapes forms complementary to the guiding portion 60 of the hook 58, as schematically shown in FIGS. 8-10. The complementary shapes forms can include ~~have~~ engagement ramps 66, 68, abutment surfaces 66, or, in a non-limiting manner, lateral guiding surfaces 70.

[0047] Under the effect of the elastic member 20, the flexible linkage 30 is retracted inside the housing 22, through the opening 29 and, in the absence of the boot, it pulls the guiding portion 60 of the hook 58 along. The guiding portion is then automatically blocked against the complementary shapes forms of the base and of the drawer/slide, thus blocking the hook 58 in a predetermined position.

[0048] From this predetermined resting position, the hook 58 can be displaced longitudinally forward by the rear portion 64 of the drawer/slide 62 when the latter is controlled forwardly when the user lifts the lever. In this waiting position, shown in FIG. 5, the hook 58 is no longer

capable of cooperating with the rear bar 50 of the boot, which can then be positioned (or instead removed). This positioning is done by engaging the front bar 48 of the sole between the two jaws 52, 54 of the hinge, then by pivoting the sole of the boot 46 downward about the axis formed by hinge. When the boot is in the low position, in support both at the front and at the rear, the rear bar 50 has reached a position in which it is capable of being engaged ~~hooked~~ by the hook 58. At that moment, the user can close the binding by lowering the lever 54, which results in locking the jaws of the hinge about the front bar 48. At the same time, the drawer/slide 62 moves back and, under the return effect of the spring 20, the hook 48 moves back until it hooks on the rear bar 50 (which is not necessarily a revolving cylinder) that is interposed on its path ~~trajectory~~ between its waiting and return positions. The assembly is then in the situation shown in FIG. 6.

[0055] Furthermore, one can see that, in all of the embodiments shown, the return 34 is arranged at a short distance from the end of the flexible linkage that is connected to the boot (possibly by means of the connecting member), this being considered with the boot in the low position. The horizontal projection of this distance is preferably less than 3 centimeters, and even more preferably less than 2 centimeters. This proximity ensures that the effective return direction (which is the direction of the portion of the link that extends between the boot and the return) remains as close as possible to a parallel to the direction of the relative movement of the boot with respect the sports article (or close to the direction of a tangent to the trajectory of the boot, which is equivalent). Furthermore, both the end of the flexible linkage connected to the boot and the return are preferably arranged in an area vertically beneath ~~corresponding to~~ the vicinity of the metatarso-phalangeal articulation zone of the user's foot when the boot is in the low position.